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TOGETHER WITH
THE ADDRESS OF THE PRESIDENT:
THE PROBLEM OF TRUTH

BY
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THE PROBLEM OF TRUTH.¹

IN speaking on the same subject as that selected for the Discussion that is to take place to-morrow morning, I do not seek to forestall the results of that discussion. Nor shall I attempt to deal with what to many may seem the more profound and significant aspects of the problem, such as, for example, the relation of our finite knowing to absolute knowing, or the place which our particular truths must have in a final and complete metaphysical system. My aim is rather to set forth simply and clearly some of the more general considerations that ought, in my judgment, to be kept in mind when this subject is under debate.

Now the first requisite in this discussion is surely a definite understanding as to what truth the discussion is about. 'True' and 'false' are adjectives like 'red' and 'sweet' or 'good' and 'bad,' and, like them, must be taken to qualify some object or objects. But the objects they actually are taken to qualify are various, and hence an ambiguity in the conception of truth. We not only apply the terms to ideas, supposals, judgments, propositions, beliefs, and the like, but we also meet with true and false friends, true courage and beauty, false modesty and honor, and, alas, sometimes false dice, hair, and teeth. In this sense falsity may be itself a character of truth: "his faith unfaithful kept him falsely true." In the Hegelian philosophy we have another use of the term, according to which the higher category is truer than the lower, teleology is the truth of mechanism, spirit the truth of nature. We shall avoid at least one source of confusion if we

¹ Delivered as the Presidential Address before the American Philosophical Association at Cornell University, December 27, 1907.

agree, to begin with, that our concern is with the truth of propositions. We assume that propositions are either true or false, or neither true nor false, or, in case a number of propositions are involved, are at once partly true and partly false, and that, in any case, regarding any intelligible proposition the question can be asked whether it is true or false, and in what way.

If we agree to this, then certain not inconsiderable consequences would seem to follow. One, and most important, is that we recognize the truth we are talking about as a quality found in quite particular truths. For every proposition, whatever its range or comprehension, expresses and embodies a single, even if complex, truth, and the number of possible truths is as infinite as the number of possible propositions. This is not to say that truths are disconnected, or are, or relate to, 'independent entities,' or are merely externally connected in a series. Propositions hang together; one truth implies, follows from, leads to another. Hence the possibility is not excluded that many truths may cohere together to form a system, and that all truths may ultimately appear as elements in one comprehensive system or realm of truth. But this last should not be dogmatically assumed at the outset in such a way as to prejudice investigation into the nature and conditions of particular truths. Not even the most resolute defender of an absolute system would maintain that such a system was even remotely attainable by man.¹ Not only have the propositions in common use little or no evident connection, but within the most organized forms of our knowledge, — the sciences, — principles of wide import in one department are totally ignored in others. Moreover, a system of truth is really, from the propositional point of view, a system of truths, and cannot, as such, be expressed or exhibited in any single proposition. Philosophers, as we know too well, often require for the expression of their systems one or several pretty ponderous volumes. A true system would be one, all of whose propositions were true and also connected. Propositions about the system, however, are just as particular as propositions about its parts or about the

¹ "It would be impossible that any man should have a world, the various provinces of which were quite rationally connected, or appeared always in a system." Bradley, *Appearance and Reality*, p. 367.

connections of its parts. At the outset, then, we ought, I think, in this discussion to recognize to the full the particularity of all propositional truths, and that whether they have to do with the more special or the more general aspects of their subject-matter. We ought, as far as possible, to avoid talking of truth 'at large'; and we ought equally to be on our guard against any bias in favor of a peculiar type of truth, as, for example, scientific as opposed to philosophical truth, or *vice versa*, or of either as against the episodic truths of every-day life. For if every propositional truth is particular, there is no *prima facie* reason for regarding one as more or less true than another, so far, that is, as it is true at all. Truths differ in value and significance; some are trivial, some perhaps sublime. But, apart from special theory, there is no apparent reason why a proposition about even so trivial a circumstance as the present state of the weather, — which indeed may be important enough on occasion, — should not be as true as the truest propositions about such exalted objects as the existence of God, the constitution of the universe, and the destiny of the human soul.

The next point is, that the truth of any proposition must be judged with reference to its own unique meaning and intent. It means to assert something specific about something in particular, whether the form of the proposition be particular or general. If it means to assert something about 'this,' it must not be condemned because it does not assert something else, or because it tells you nothing about 'that,' or because it does not exhaust the possibilities or attain the ideal of a fully unified knowledge. It may be quite true, for example, that a certain train is scheduled to leave the station at five o'clock, whatever may be true, in metaphysical reference, as to the nature of space and time or, in economic reference, as to the management of a railway system. But if this is so, then we cannot admit, from the propositional point of view, that doctrine of 'degrees of truth' which asserts that every proposition is partly false because of the modification it would receive by supplementation and re-arrangement when brought into relation with other elements which, for the time being, have been left out of account. This assertion appears to

rest on a different conception of truth, Judged by its own meaning and intent, a proposition may be true without being all that is true, and a truth that is only true about the whole need not be more wholly true than one that is about the meanest of its parts. Again, a proposition that is complex may contain more truth than another without on that account being any more true. It is plausibly objected to this, that truths are not independent, that they at least tend to systematic union. And this we have admitted. But then, it is said, as elements in a system, each truth must modify and be modified by all the others; as a member of the system, it cannot remain what it was in isolation, it gets transformed, and the more so in proportion to the width and depth of its connections. And from this it follows, on the argument, regarding 'Reality' as a system one of whose aspects is a completely unified 'Truth,' that all truths, in the end, are 'error,' and that, for example, mathematics, the most exact of the sciences, is also, as the most abstract, the least 'true' of all.¹ We escape this consequence, I think, by holding strictly to our principle that the truth of any proposition must be judged with reference to its own unique meaning and intent, and by distinguishing between truth and its evaluation. A given truth does, indeed, suffer modification in being systematically connected with other truths, but such modification need not be at all one of the truth of the proposition, but only of the way the truth is held, understood, and appreciated. Thus the schoolboy may know only the isolated truths that $5 + 2 = 7$ and that $5 \times 2 = 10$; but if he later comes to see that these truths are connected, that $5 + 2 = 7$ because $5 \times 2 = 10$, and *vice versa*, that neither would be true if the other were false, or if, as a philosophical mathematician, he holds a theory of numbers which throws light on the nature and connection of these propositions, he certainly holds these truths in a different way, they have for him a different value; but how has the truth of either proposition been itself affected? That $5 + 2 = 7$ is, I suppose, as true, neither more nor less, to the mathematician as to the schoolboy, though the former has so many more connected truths at command that it has for him a richer signification. For truths too, like sensible facts, have an

¹ Bradley, *Appearance and Reality*, p. 370.

import beyond their own intrinsic quality. Of course, the proposition in question is quite true only relatively to the general character of its own number system; but this was implied in its assertion. But in this reference its truth would not be in the least affected by the discovery, or invention, of a different number system, if that were possible, just as a truth in Euclid is not affected by the equally valid, though less serviceable, truths of other geometrical systems.

The fact that one truth is not, as such, altered by its connection with other truths, may appear perhaps in a still clearer light, if we take a case where, as things stand, there is no such connection, and then imagine what would happen if such a connection were brought about. "This table is round," and "this table cost \$500," are propositions which have no sort of logical connection; and hence the truth of the one would, in so far, be unaffected by that of the other. But suppose that round tables were exceedingly difficult to make, and that, besides being rare for this reason, they were esteemed peculiarly beautiful. Then they would be objects desired of the rich and coveted by the connoisseur, and a connection between the shape and the price would be so definitely established that we should see at once that a true proposition about the one would involve a corresponding proposition about the other. But would either proposition be more or less true? Would the table be any more or less round, or its price any dearer or cheaper? The suggestion is manifestly absurd. The difference would lie not in the truth, but in the truth's evaluation.

It being understood, then, that the truth we are talking about is truth of propositions, that every proposition is specific, and that its truth is relative to its intended meaning, we may now state the essential problems in regard to this kind of truth. They may be expressed in two questions: (1) What do we mean by calling any proposition true? and (2) How do we know that it is really true? Or, otherwise stated, (1) What is the nature of the claim we make for it when we call it true? and (2) How is this claim either established or discredited? The first question relates to the nature of truth, the second to its evidence.

But before we attempt to deal with these questions, we ought, I think, to enquire more particularly, first, into the nature of the object to which the predicates 'true' and 'false' are applied, and the possession of which constitutes that object a truth or a falsity. We have agreed that our concern is with the truth of propositions, but the truth of a proposition is clearly not resident in the mere form of the words. What is true, if true, and false, if false, — and also, it may be added, what is doubtful, possible, necessary, etc., — is, primarily, what is asserted. In what is asserted we seem to have the original locus of a propositional truth. If what is asserted is true, then, and only then, is the proposition true, and thereby whatever mental act, content, or attitude it expresses on the part of the individual making or holding the proposition; and contrariwise, if it is false. Now to apply the adjectives 'true' and 'false' directly to what is asserted, we have, curiously enough, to change the form of the proposition. In the proposition something is asserted of something, something is declared to be or not to be, to happen or not to happen, or, in general, to be so-and-so characterized. If now what is asserted is to be itself characterized, if, for example, it is to be qualified as true or false, it must itself be expressed as the subject of another proposition having such a character as its predicate. And this, as especially pointed out by Meinong, is done by expressing the 'what' that is asserted by a sentence beginning with 'that,' or by some form of words equivalent to such a sentence. Thus in the proposition, "crows are black," what is asserted is *that* crows are black. The question we must now ask is, What is the logical import of such a *that*-sentence? A proper answer should throw some light on the meaning of truth.

In dealing with this question, we may proceed in either of two ways: we may abstract altogether from the thinking process and consider only the logical character of what is asserted, or we may connect the latter with the process out of which the assertion issues and the attitude in which its truth or falsity is recognized, and seek to determine its position and character relatively to that. From either point of view, its most salient feature appears to be that of belonging to an ideal realm of meaning distinct from and,

in a way, opposed to concrete and actually existent fact. That this paper is white, is neither an existing thing, like the paper, nor a real predicate of existence, like the paper's whiteness. The white paper exists, but I cannot in the same way say 'that this paper is white' exists. I do not mean that this truth can in no sense be said to be. It can be made the object of a reflective thought, it can be examined as such, it can be talked about and become the subject of other true or false propositions. Thus, if it is false that this paper is white, then that this is false, is true. The point is that what is asserted is always ideal, and is never identical in existence with the object that the assertion is about. This is true even in the case when the latter object is itself ideal. 'That 3 is greater than 2,' for example, is neither the number 3, nor the number 2, nor the greater magnitude of the one as compared with the other. This difference gives rise to the problem as to the relation of the two, the relation of the meaning to the fact meant, in which it is usual to find the defining character of truth. Leaving this for the present, I may here point to an important consequence of the distinction.

There is high authority for the doctrine that truth (and also error) is a content of predication qualifying reality, a doctrine which is developed in the assertion that perfect truth would be the universe.¹ But if our distinction holds good, either this is impossible, or it relates to another kind of truth than propositional truth. For the truth that so-and-so, for example, that this paper is white, is neither the subject of the proposition, nor the predicate, nor any quality of the object taken as real, but something quite different, namely, a truth about it. How is the case altered if for a particular finite object, like this paper, we substitute 'Reality' or the universe? For whether the content by which the subject of a proposition or judgment is qualified, — and you may interpret your proposition so as to make the 'real' subject anything you please, — whether this content, I say, be conceived as a simple quality, or as a complex of qualifying relations, or, again, be conceived in abstraction as an 'idea' divorced from

¹ "We must unhesitatingly assert that truth . . . if for itself it were perfect, would be itself in the fullest sense the entire and absolute universe." Bradley, "On Truth and Copying," *Mind*, N. S., Vol. XVI, p. 170.

existence, or concretely applied as actually qualifying an existent thing, there is, I submit, a clear distinction to be drawn between any finite object, or reality at large, taken as the subject of predication together with whatever it may be said to be or to have, and the truth (or falsity) *that* it is, or is of such a sort, or has such and such a character. The character of a being is one thing, and may be called an idea or the object of an idea, as we choose to define it; but that a being has this character is surely not an identity, pure and simple, with the character itself. If, therefore, we assume that Reality is one whole of being with a definite structure, and that this structure, its defining content, is grasped in a single thought, this thought, I suppose, might be said to possess the world in idea. But unless the thought went on to actually predicate of Reality as its structure the content thought, it would not possess the truth that Reality was so defined. But if it should effect this predication, then this truth, that Reality was so defined, would be, as truth and meaning, quite distinct from the content predicated, and this even though it were itself included in it. I am not, of course, maintaining that it is possible to grasp the world's structure without judging, or denying, on the other hand, the possibility of a speculative grasp, or æsthetic experience, of reality beyond judgment. I am only maintaining that the so-called 'truth' embodied in the content of predication, though the universe were the subject and though its whole content were exhausted in the predicate, would not be identical without difference with the truth of any possible proposition. And I accordingly deny that truth, in the propositional sense, is, properly speaking, a defining quality of any real being at all. It is neither the subject nor the predicate of a judgment; it is neither substantival nor adjectival. It is a form of ideality, but its own unique form.

Viewed *in se* this form appears, in each instance of it, to be (α) objective, that is, something cognized, or to be cognized, as distinct from the processes of cognizing on the part of any individual mind. Hence it may be treated, for certain purposes, independently, just as physical objects are treated independently in the physical sciences, without reference to the conditions of our

knowledge of them. It appears (*b*) as universal, that is, as claiming recognition and acknowledgment on the part of all minds. But whether it is actually acknowledged or not by any particular mind, seems indifferent to it. Failure to acknowledge it may be due to ignorance or to mental incapacity. Hence it may be maintained that truths, as such, are independent of their recognition by any mind at all. Truth, on this view, would consist in an ideal relation between what is theoretically capable of being asserted and the objective fact that the assertion, if made, would be about. So extreme a contention we may not now be prepared to admit; but the recognition of even the relative independence of truth should serve, I think, as a salutary check on the tendency evident in recent discussion to interpret the problem of truth exclusively in terms of the process by which the claims of our ideas to recognition as true are tested and established. The view referred to would mean, I suppose, at least this, that there are real facts in the world, and hence, ideally, truths about those facts which are unknown and some of which, from the very nature of the case, are incapable of becoming known by any finite mind. And this we seem compelled to admit. For not only is knowledge progressive, so that more facts and objects get known or better known, but an infinity of facts collectively known are unknown to any single mind, and an infinity of facts once collectively known become irrecoverably lost, namely, the personal experiences of the individuals that made up the succession of all the generations past. Moreover, no finite mind knows, or pretends to know, the world's infinite multiplicity in all its details, nor the specific ground or grounds of its differences, nor all the implications of any one of its actual experiences. No one, however relative to our thought and purpose he holds the world to be, seriously believes that it is wholly plastic, that it is wholly made and remade by our volition, and that there is nothing, I will not say merely given, but given in any sense at all to be simply acknowledged, or that fact and truth only are as they are discovered by us. But if this is so, then the distinction between truth and recognized truth, as well as between truth and the process of testing and acknowledging

it, would seem to have theoretical importance, even though it should be held that what is truth for us cannot be determined concretely apart from the conditions under which it is known.¹

Relatively to the act and process of knowledge, the meaning that is capable of setting up a claim to recognition as true may be viewed in several ways. Primarily it is of the nature of a supposal. The ideal meaning may be simply entertained. So far, though the supposal be false, there is no error. If, however, it is accepted, there is judgment and belief, and the belief may be erroneous; but if it is also accepted, so to say, by the object as tested by the criteria suitable to the case in question, there is true opinion and knowledge. Three distinctions, pointed out by Meinong, seem to be essential in the analysis of judgment. We distinguish (1) the act of judging, — a temporal event in the mental history of the individual; (2) the object or subject-matter that the judgment is about, — this may be anything you please, but it is at any rate something other than the thinking and the particular thought that aims at the knowledge of it; and (3) the thought or supposal as an ideal, but immanent, objective content, — what the object is thought as, and what is asserted in the proposition. Here the problem of truth concerns the relation of the 'immanent,' thought-possessed, but objective content of the supposal to the contrasted 'transcendent' or quasi-transcendent object that the supposal's content means to be true of.

Another way of viewing the matter is to consider the supposal, the content of meaning expressed in the that-sentence, as of the nature of an answer to a question, or the solution of a problem.²

¹ Besides objectivity and universality, it is usual to ascribe timelessness and unchangeability also to what is asserted, taken as true; and these characters, interpreted in a logical and not in a temporal sense, would seem to hold except in cases where the notion of time enters into the predication, and there the relations are peculiar. If the reference is to past time, the truth (*e. g.*, that Cæsar existed) would not be true before the event, but would be unalterably true after it; if to future time, it would be unchangeably true before the event, and would cease to be true after it; while, if referring to present time, its truth would be limited to the present. The facts may be otherwise interpreted so as to make the truth appear timeless in all cases, and only its recognition an event. But the matter cannot be further pursued here. Given the fact, however, the special relation of its own truth to it is timeless in any case.

² It is from this point of view that Stout treats, successfully, I think, the problem of error in his essay in *Personal Idealism*. The point of view itself, however,

I do not, of course, mean that every time we frame a proposition we first consciously propound a question. But we can always put a question to which the proposition gives the answer. It answers such questions as whether, or what, or why, or how. And so far as it is an intelligible proposition, it is a specific answer to a specific question, and its truth or falsity must be judged with reference to its intention to answer just that question. This is but the familiar doctrine that we can't tell, and can't even properly inquire, whether a proposition is true or false till we know what it means, that is, what it means to assert and about what. And herein lies one of the most fruitful sources of error, that we don't always ourselves know what precisely it is that we do mean. It has been held, indeed, that this vagueness infects, in some degree, all our thinking, and that no one in asserting knows precisely the sense in which he affirms or denies.¹ But this assertion must itself, on the hypothesis, be at least a little vague, and must mean something at least a little different from what it seems to mean. Is it necessary to push scepticism so far? We can hardly hope in all cases to escape the pitfalls of language. But there are cases where our meanings can be referred to well-defined abstract relations, as in mathematics, and a sensible fact, to which other of our meanings are relative, can be, if not defined, pointed out and experienced. Our meanings must, in any case, be adequate to our purposes. Assuming that our meanings can be made adequate to our purposes, we demand of the proposition that it shall satisfactorily meet the conditions of our problem. The problem of truth, then, is to determine what, in specific cases, these satisfactory conditions may be.

With these considerations in mind, we now ask, What do we mean by calling a proposition true?—for a proposition is certainly not made true simply by being called so. The question, therefore, is, What is meant by a proposition being true? True, we ask, to what? and also, to whom?

The answers commonly given to these questions are, as we all goes back to Plato, who represents thinking as a sort of conversation in which the soul asks and answers questions. When the thought is decided, says yes or no, we have *δόξα*, or judgment. See Natorp, *Platos Ideenlehre*, p. 115.

¹ Bradley, *Appearance and Reality*, p. 367.

know, these. A proposition is true when the idea, thought, or meaning it expresses agrees with reality, or the facts, — reality, or fact, being what it is true to ; and, a proposition is true when the thought it expresses coincides with what would be the thought of an ideal thinker who had actual knowledge of the facts, — such an ideal thinker, actual or merely conceived, being the subject for whom it is true. In either case a proposition is called on to validate its claim to truth by reference to a standard, on the one hand, the standard of fact, on the other, the standard of an ideal thought. In the first case, the emphasis is on the verifiable objectivity; in the second, on the logical universality of truth. This, in its most general terms, is the ‘intellectualist’ view of truth ; and so long as we stick to these most general terms and ask no embarrassing questions, it is the view which we all, I suppose, in a manner, accept. At any rate our leading pragmatist assures us that the definition of truth as agreement, and of falsity as disagreement, of our ideas with reality is accepted by pragmatists and intellectualists alike as ‘a matter of course.’¹

But the difficulty here is to agree on what we mean by the terms of this definition. Following the indications already given, we come to some such conclusions as the following.

First as to the ‘idea.’ The truth we are considering being truth of propositions, the idea must not be taken primarily as a bit of psychic existence, a subjective state of mind or an event occurring in the flow of consciousness ; nor must it be taken as a single term, like the idea of ‘red’ or of ‘equality’ : such single terms or concepts, apart from their use in propositions, may be said perhaps to be accurate or inaccurate, but cannot be said to be either true or false. The idea that is to ‘agree with reality’ must be the whole objective, immanent meaning of the supposal, that so-and-so.

With this understanding of the term ‘idea,’ we ought to have no great difficulty in explaining what, in general, we mean by the other term in the relation of agreement declared to be essential to the constitution of a truth. The term ‘reality’ is, indeed, in my judgment, unfortunate, since it suggests too much the idea of either a physical or a metaphysical entity. But true proposi-

¹ James, *Pragmatism*, p. 198.

tions may be made about anything thinkable, and the range of the thinkable is unlimited. True propositions may be made, for example, about imaginary objects, like Alice in Wonderland, and impossible objects, like the *perpetuum mobile* and ropes of sand, as well as about things that actually exist and events that actually happen; and although these propositions may be interpreted as having an indirect reference to a world of objects regarded as more truly 'real,' it hardly seems necessary to do this in all cases in order to give them an intelligible meaning or to acquire insight into their truth.¹ But undoubtedly propositions, whether true or false, mean to assert about something. They may be taken as meaning to answer a specific question which one might intelligibly ask about the something in question. And obviously the right answer, the answer which would satisfy the interest of knowledge, whatever other interests it might or might not satisfy, would depend on the constitution, actual or ideal, of the object or subject-matter of the inquiry, and not alone on the cognitive activities and subjective interests of the thinker. He may even have himself made the object, in the more obvious sense of 'made'; it may be his sonnet; or it may be the experiences which are special to him and in their uniqueness unsharable, like the interior play of his mental imagery: the object once constituted, be its constitution eternal or limited in existence to the fleeting moment, demands cognitive recognition in its own right and dictates the terms under which a true answer can be given to any intelligible question about it. By 'reality' or 'fact,' then, in this connection, we mean whatever in the object of the thought or subject-matter of the enquiry must be taken account of in determining the nature of the answer, satisfactory to the intelligence, to a specific and intelligible question about it. 'Fact' is whatever in the object, be it sensible or ideal, a thing or event or action or attribute or any mode of relation, so controls the process of knowing *that* object as to make the thought or supposal not only acceptable to the individual thinker, but fit for acceptance universally; for such universality is logically implied, as we have seen, in the conception of truth. Thought so controlled is true,

¹ Attention may be called in this connection to the important investigations in *Gegenstandstheorie* by Meinong and his school.

whatever subjective motives may guide and inspire it; thought not so controlled yields no knowledge, however great the subjective assurance to the contrary. And perhaps so far there is no real ground for dispute. The dispute, I suppose, would relate to the nature of the control. Certainly no intellectualist has emphasized more strongly the coerciveness of outer fact and of certain 'relations of ideas' or, as we should prefer to say, ideal objects that function as facts than Professor James. He admits expressly that at least certain truths are determined in advance of our recognitions and any pragmatic testing of them.¹

I might be expected, perhaps, at this point to consider whether the 'reality' with which our ideas, to be true, should agree is not, in the end, no special and particular fact, least of all such imaginary objects as fairy tales and such impossible objects as round squares and ropes of sand, but 'absolute' reality, whose content, or one of whose aspects, is 'absolute' truth, which sets the standard for all 'truth' that is merely relative and finite. But a thorough discussion of this view would lead us too far, and I have already, I think, sufficiently indicated my position. I admit, certainly, that truths are connected together and tend to cohere in systems, though I have not been able to see that one truth interferes with another truth in the system from relation to which it derives an added significance. And I admit, of course, the linkages of facts, but I am similarly unable to see that one fact, from the point of view from which it is the particular fact that it is, is transcended and annulled through relation to other facts. The idea is thus suggested of an ultimate system of reality and an ultimate system of coherent truth, and this may perhaps be called 'absolute.' But, as we have seen, no such conspectus of the systematic connection of all realities and of all truths is attainable by man, and it is even conceivable that no such ideal system, completely self-fulfilled, actually exists, but that it is the end-term of a creative process in the universe itself. The universe has, we assume, a fundamental nature and constitution, and this grounds the possibility of truth, but also, we must add, of error. Meanwhile, as our Hegelian teachers tell us, anything may be taken as 'real' which

¹ "The hundredth decimal of π is predetermined ideally now, though no one may have computed it." *Pragmatism*, p. 211.

is taken for what it is and not for something that it is not. From this point of view, I have insisted that the truth of a proposition must be judged from its own chosen standpoint, the particular question it means to answer, and the special reality, fact, or object it selects and intends. And since our theme is the truth of propositions, and any proposition about the 'Absolute' and its relation to finite truth would, from our point of view, be no more true and would certainly seem much more difficult to establish than a proposition telling us, for example, what o'clock it is; since, practically, in many cases we have no need to appeal to the high court of metaphysics to derive satisfactory answers to our questions, and in many others have simply to ignore our metaphysical theories to get any valuable answers at all; since no way has ever been devised whereby we could use the 'absolute' criterion to measure our other truths by; since the conception of such a criterion and the conclusions drawn from it imply a conception of truth different from the propositional; and since, finally, we are assured that, in the end, there is no relation between truth and reality at all, since, in the end, there are no separate terms,¹ whereas this relation is just now our problem: I hope that these reasons for not pursuing the subject further may be deemed sufficient.

A difficulty might, however, be found in the conception of a relation of truth to fact, in that what is taken to be true is also taken to be the fact. If it is true, for example, that I exist, then that I exist is also a fact. Hence, it might be argued, there can be no relation of agreement or correspondence between truth and fact, since no difference between them can be discovered.² The difficulty, I take it, is purely verbal, and may be escaped by a verbal distinction. We may distinguish, if we choose, between fact that and fact of; the real distinction is between the object of the assertion and the content of the supposal or judgment. My existence is a fact, and the truth that I exist is also a fact; but the latter is surely not precisely and numerically identical with the fact of my existence, regarded as the real content of my

¹ Bradley, "On Truth and Copying," *Mind*, N. S., Vol. XVI, p. 172 f.

² So G. E. Moore, article on "Truth" in Baldwin's *Dictionary of Philosophy*, Vol. II, p. 717 (b).

being. It is a fact that the horse is a mammal, but this truth does not take into itself bodily the quadruped and its mammalian character, nor does it itself enter into the beast's vitals.

What, then, we at length ask, is the nature of that relation between idea and fact indicated by the term 'agreement'? Ideas to be true must agree with the facts, but how agree?

The view that a truth is, in some literal fashion, a 'copy' of the fact, is now pretty generally discredited. Too much honor is done it when it is accorded a limited sphere of validity in the relation of the mental image to its original. For granted that the image is a true and faithful copy, it (the image) is no more a truth, in the propositional sense, than any external resembling object; and the truth that it is like the original, while clearly in some sense agreeing with the fact of the resemblance of which it takes account, neither is that resemblance nor a copy of it. Yet even those writers who are most emphatic in rejecting the copy theory of truth not infrequently employ language which implies some form of correspondence. They will complain that their own views are *misrepresented*, or that those of their opponents bear no sort of *likeness* to the facts. And quite lately Mr. Bradley, after demolishing, from his own point of view, the copy theory as false in principle, goes on to mention four senses in which, from a lower point of view (which is, of course, our own), truth may be said to correspond with reality and even to reproduce fact. It is interesting to observe that the first three of these senses, referring to the acquisition of truth (the fourth referring to its communication), reduce essentially to that demand for the control of thought by the object, of which I have spoken: the individual must suppress what is special to him to attain what the thought of the many individuals must conform to; he must follow the object in whose ideal development he coöperates; and he must take up in reflection the given qualities of sensible matter and accept more or less brute conjunctions of fact.¹ These meanings may be generalized in the statement that a thought, to be true, must submit to the control of whatever objective conditions predetermine its fitness for universal acceptance.

¹ "On Truth and Copying," *Mind*, N. S., Vol. XVI, p. 174 f.

But the 'correspondence' of truth with fact is usually taken as a static relation in the result of thinking. Can any intelligible meaning be given to this conception? I incline to think that there can, although I admit a difficulty in expressing it, and shall, therefore, not be surprised if what I am about to say may seem crude and unsatisfactory. Still I am convinced that there is such a relation. Take, for example, the mental image which, by hypothesis, resembles, or copies, the percept. This object we both think and think about. Hence an ambiguity in the conception of the 'content' of our thought. On the one hand, *what* is thought is the object, the mental image. But this image, as we have seen, is not a truth, but an existent fact, whose resemblance to the percept demands our recognition. On the other hand, *what* is thought is that this object resembles the percept. And this, by hypothesis, is true and a truth. But *this* objective content of the thought,—to repeat a reflection now familiar,—is neither the image, nor the percept, nor anything that bears the slightest resemblance to them. It is the thought, and in the proposition the assertion, of *their* resemblance. But how could this assertion be truly made unless the meaning of both terms and the meaning of their resemblance were contained and established ideally in the thought of them? We use, to express the presence to a mind of this meaning of the object, the metaphor of reflection, and this suggests a prior independent existence of the object and some sort of copying. But there need be no priority in time, nor need the object have an existence beyond thought or apart from its presence in the reflection. The conception suits equally well an idealistic and a realistic interpretation. The full thought, in fact, is a reflected thought: it is at once a thought of and a thought about. And the complexion,—the terms and relations that make up the complex structure,—of the intended object, in that aspect of it which is at the time in question, must, it would seem, be ideally taken up into and define the complexion of the reflected content, whenever that content is true. Or we may say, perhaps, that it is the same content from different points of regard. It is impossible to avoid metaphors; but they must not be unduly pressed. The reflection in

thought is not on all fours with reflection in a mirror; it does not in the same way 'copy' its object; it apprehends and ideally assimilates it. I am speaking here, of course, of recognized truths. As to truths unrecognized by any human mind, we should have, I suppose, to define them,—apart from the admission of other forms of mind, and ultimately an omniscient mind,—as the capacity in the object—it is impossible to avoid the thought-reference—to manifest itself to some mind as being of the sort, character, or complexion that it is, that is, that it has in it to be seen to be whenever, under describable conditions, it is so manifested.

Truth, then, as related to the act of cognition, is intellectually reflected fact. The important question then is, How do you know, especially when the object referred to is not palpably present, that the assumed or reflected fact is truly so? How do you know in the given case that the thought has submitted so completely to the control of fact as to be not merely accepted as true, but worthy of acceptance?

In the course of reflection on this subject, various criteria have been proposed: the force and liveliness of the impression, clearness and distinctness of the thought, inconceivability of the opposite, coherency and systematic connection of ideas, verifiability in some definite experience. To some only certain propositions have seemed to require a criterion by which their certainty might be assured, other propositions appearing as self-evident. To some, again, the differences in propositions and in the kinds of subject-matter have seemed to demand corresponding differences in the criteria of their truth; Aristotle, we remember, regarded it as a mark of defective education to require the same kind of evidence in ethics that is demanded in mathematics. At the present time the most prominent candidate for favor in this field offers us a universal criterion; it is the theory of pragmatism that every claimant to truth is tested by the satisfactoriness of its working. But pragmatism is more catholic still; for while explaining how truth is tested, it professes at the same time to explain what truth is. Truth, it says in effect, is not a quality belonging from all eternity to some propositions and not to others; it is something

made in the process of what is called validation or verification. This conception gives a new meaning to the idea of 'agreement' in the definition of truth. The process of truth-making implies, not a static agreement, but a 'fitting' of the idea or meaning with the facts functionally, so that we are led by the idea from a less to a more satisfactory experience, from a less to a more satisfactory mode of thought, and are thus enabled to deal with our experience, in its various parts and aspects and as a whole, more effectively than if, instead of adopting the idea or supposition which is thus established as true, we had adopted some other idea or supposition. The test of a claimant to truth, then, is just this effective working; and that it works effectively, that it leads to good and useful consequences, leads to harmony and control of the processes of our experience, is precisely what we mean by calling it true. What does not so lead is rejected as, and is, error. Thus the whole problem of truth is solved at a stroke. You *know* that your thought is true, pragmatism says, when being acted on, being followed out in its consequences, theoretical or practical, it leads directly or indirectly to the specific experience which it promised, and thereby enables you to deal with the concrete situations of your life and with your life as a whole in ways which yield, in the long run, the greatest amount of satisfaction. You know it is true, because you choose to call that true which does this. The proof of the pudding is in the eating; the key that fits is the one that turns the lock.

If this account is correct, the gist of the pragmatist's contention about truth may be expressed in three propositions: (1) The test of the truth of an idea, supposal, proposition, judgment, or belief is its serviceableness in use; (2) truth, in the only intelligible meaning of the term, is a quality belonging to the ideas, beliefs, etc., that are capable of meeting this test; (3) since use is relative to ever-changing conditions, truth lives and has its being in a process of development, — it is something made, not ready-made, or, put bluntly, it is an event that happens.

With the first of these propositions, that which declares the test of truth to lie in its serviceableness in use, I at least, provided I am allowed to interpret the phrase, have no quarrel. A claim-

ant to truth, whenever its truth is not self-evident, must submit to be tested; and it is difficult to see how it could be better tested than by putting it to work. Even a 'self-evident' truth, like the law of identity, is known only by abstraction from its use in innumerable instances, and gets its meaning defined and qualified by application. How otherwise, while acknowledging that *S* is *S* and *P*, *P*, should we not hesitate ever to utter a simple proposition of the form *S* is *P*? But here everything depends on the interpretation. 'Serviceableness in use' may be taken so narrowly as to make a lie which saves a life or extricates from an embarrassment a splendid truth, and the recognition of a disaster which paralyzes the energies of the man affected by it a fatal error. On the other hand, it may be taken so broadly as to include all other criteria, and especially that of the systematic coherency or harmony of experience and thought, since one of the uses of 'true' thought will certainly be to reduce the various items of our world to consistency, and to develop insight into and comprehension of the nature of things. Of the second proposition I am more doubtful; for though I admit that theoretically every truth implies capacity of verification, I am by no means sure that this is the sole meaning of truth, and still less convinced that we are justified in assuming that every truth must needs be capable of actual verification under the conditions of our human experience. As there are even now truths acknowledged of some which are yet unacknowledged of many, why may there not be truths forever incapable of being thought, acknowledged, or validated by any human individual? I understand, however, the pragmatist to mean that every truth has an actual or potential existence in human experience. This is suggested by the third proposition, which appears to make truth a quality of our knowledge, and change and growth in our knowledge a process of change and growth in truth. Our analysis leads to a different interpretation. I have maintained, namely, that we must distinguish in cognition the act or process, the object that it is about, and the objective content of the supposal, the meaning expressed in a that-sentence when truth or falsity is predicated of the proposition. I have further maintained that true and false are

primarily predicates of this objective meaning and only secondarily predicates of our judgments and beliefs. Finally, I have contended that this meaning is not a subjective apprehension, but an objectively apprehended somewhat, having logical characters of its own, much as physical objects have physical characters, independent of their recognition by any finite mind. Consequently I hold, with Mr. B. Russell, that some propositions, that is, their objective meanings, are true, and some false, just as some roses are red and some white; in other words, that the proposition, if true, bears, as such, a purely logical relation to the fact that it is true of, and that this relation is not a process or event, like the cognitive process through which it gets into our minds, but merely,—to use the familiar expression,—one that ideally holds or obtains. Hence the claim to universality, a claim which, of course, if it is to be acknowledged, must be tested in a process of knowledge, but the validity or falsity of which is not first made when it is first made out. Thus the realm of meanings to which the objectives of our judgments belong constitutes, in my view, not a realm of actualities, but one of ideal possibilities. Unless we are prepared for the metaphysical interpretation of a universal consciousness, it cannot be said to exist, save as particular items of it appear from time to time in recognizing minds. What sort of existence has the truth that Cæsar once lived when nobody is thinking it? The presence of a truth in a consciousness, from the logical point of view, can only be regarded as an accident, that is, as an incident due to empirical conditions, and not necessarily contained in the conception of the meaning. It is something that the individual mind may become conscious of, but again may not. It may be objected that this notion of an objective truth distinct from the objective fact that it is the truth of and logically independent of subjective belief, is a fiction. It may plausibly be held that the only terms we have here to deal with are the objective fact and somebody's idea, opinion, or belief about the fact, and that the only question at issue is that of their relation, which is also a fact. I should reply to this by saying that, of course, the question cannot be raised about the truth of any particular statement unless the statement is first made, and this

certainly implies the existence of the ideas or belief involved in somebody's mind. But when we consider more closely what the statement means, we find that its meaning is not limited, as is the act of judgment or the disposition of belief that it defines, to its existence in the temporal flow of anybody's consciousness. This is a peculiarity of the logical aspect of our thought, and this, I take it, is as deserving of recognition as are the facts of mental or of extra-mental existence.

Pragmatism, in the view of its advocates, is so much the subject of misunderstanding that I shall not be surprised if I am told that my criticism is beside the point. I have the feeling myself that it may be so ; for the writings of those who are commonly regarded as pragmatists make on me the impression of a conflux of tendencies rather than that of a settled doctrine that has been worked out to a common agreement. It is hard sometimes to tell whether a particular statement by a pragmatist writer is to be taken literally, or whether it is to be taken sympathetically, with a large license to the imagination. My object, however, is not so much to criticise as to offer considerations that may serve to bring out discussion and to clear up a situation that certainly at present seems not a little confused. At the risk, therefore, of appearing to misunderstand and in the hope of a solution, I will venture to mention two other difficulties that have occurred to me in the endeavor to follow the current of the pragmatist tendency. The first relates to the instrumental character of thought, the second to truth's claim of universality.

I. Pragmatism insists, as we have done, on particular truths rather than on the 'truth' of system, on relative truth rather than on truth absolute, recognizing, however, as we also have done, the important function of particular truths to hang together in systems. But whereas we have regarded the supposal or belief so to say structurally, as in itself reflecting or not reflecting the state of the facts, pragmatism, at least in one of its tendencies, appears to regard it solely in its instrumental character as a plan of action and means of effective control of situations. But, granting the instrumental nature of thought, must we not also in the end adopt once more the structural point of view? The idea con-

ceived, let us say, as a plan of action, — though many of our ideas, and notably those of the man in the much discussed illustration who, lost in the woods, ideally constructs his environment, seem rather to instigate than to be themselves plans of action, — the idea, we will suppose, has been worked out ; it has been verified ; it has fulfilled its purpose ; it has been found true. What, then, we ask, is the relation of this true, validated, fulfilled idea to the facts? We surely cannot say now that it is true because it leads to consequences which validate it, for whatever further consequences it may have, it has already been validated. Pragmatism perhaps might answer that in this case we read the consequences retrospectively. But even so, the process has clearly come to a pause, been summed up, stands there in its result relatively complete. We have discovered, for example, that the creature dimly discerned through the foliage was a stag by tracking and shooting it ; does the now verified truth that it is this noble animal mean only the particular hunting activities by which this truth has been surely ascertained? Or does it mean certain further consequences to be realized by action, for example, the supper by the camp fire and the antlered trophy in the hall at home? It means, that is, suggests, implies, stands for, leads up to all this, or it may ; but does it not, as truth, mean a certain structural relation of the ideas to the fact, and does it not mean this all along?

2. Pragmatists seem at times to come perilously near saying that what seems true to you is true, provided it effectively meets your requirements ; or, again, that it is true, if it meets the temporary demands of a group or generation. Truth is in the making ; the truth of one age is the error of the next. And if we say, not that truth is useful, but that truth is the useful or the expedient, are we not bound to say that whatever is found useful in any respect, as, for example, in satisfying an emotional interest, is true in so far forth? Hence the charge that for pragmatism truth is 'any old thing that works.' This would, of course, be absurd. To interpret the doctrine, we must say, I think, that nothing is ever true simply, but is only true for me, for you, or for them. But how does this agree with the demand of logical universality that every proposition taken for true

claims? The pragmatist theory of truth itself, for example, is just now urging its claims to general acceptance, not because Professor James and a few other philosophers find that it 'works,' or proves satisfactory, to them, but because, being a true theory, we, as reasonable beings, ought to accept it; and were Professor James alone in his belief, an *Athanasius contra mundum*, he would still, I presume, find its lack of social recognition no evidence of its failure as truth, but would, appealing to future experience, try more than ever to convert the rest of us. How now does the pragmatist explain this character of logical universality which even he, when he argues with us, assumes to belong to *his* truth? I cannot speak for him; but taking him literally, in some of his utterances, I should suppose he might say, we make this demand because, on the whole, we find it *better* to assume that we live in a common world, and that truths about it are common truths, than to assume that every man has a private truth and world of his own; it works better intellectually and practically. 'On the whole' it no doubt does. But the pragmatic testing, I supposed, was to be applied not merely in general, but in particular. And in the case of the martyrs of science who have died for *their* truth, might it not have seemed to 'work' better to conform to the generally accepted opinions, to what we now characterize as prejudice and error? I am speaking not of the inherent agreement of truth and fact which, with its implication of a constitution in the nature of fact, is the anti-pragmatist's explanation of universality, but of its relation to general recognition. How in a particular case can pragmatism justify, in this regard, a deviation from accepted social standards? The appeal, in the case of such a departure, is not to actual and effective working in this regard, but to an ideal possible working, which assumes the principle, but which gives, and in the nature of the case can give, no actual verification of it. It is not enough to reply that the martyrs of science found it more satisfactory to die faithful to their convictions than to surrender their convictions to the popular clamor, for this only gives us the criterion of private feeling and not effective working on the whole. So far as appears, we shall have to adopt, on the principles of pure pragma-

tism, one of two alternatives : either the assumed logical universality of truth is without justification, since there are instances in which it cannot be practically verified, — in which case, it may be disallowed, whenever to do so seems to work better ; or it is justified by the fact that it is found to hold in many or the majority of instances, — in which case, the appeal is made to mere numbers. But the principle itself is appealed to in every discussion that aims to convince by argument. Hence it seems to be something that claims acceptance not merely because it works, but because it is seen to be the indispensable condition of any finally harmonious working in a world rationally ordered and socially common. The objection that pragmatism fails to give a satisfactory account of the universality of truth has been frequently made. It was urged, for example, by Professor Royce in his address before this Association four years ago at the meeting at Princeton ; it has recently been urged, with great acuteness, from a somewhat different point of view, by Professor Baldwin in his work on *Genetic Logic*.¹ This, perhaps, more than anything else, is the stumbling-block in the way of many to accepting the pragmatist's account of truth as final and complete. It is greatly to be hoped that discussion may bring out the true bearing of the pragmatist's contention on this point, that we may see clearly what justification, if any, can be given to the demand that what is true for me shall be true for you also.

H. N. GARDINER.

SMITH COLLEGE.

¹ See especially the article "On Truth," *Psychological Review*, July, 1907.

PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL
ASSOCIATION : THE SEVENTH ANNUAL
MEETING, CORNELL UNIVERSITY,

DECEMBER 26-28, 1907.

REPORT OF THE SECRETARY.

THE seventh annual meeting of the American Philosophical Association was held at Cornell University, Ithaca, New York, on December 26, 27, and 28, 1907. At the business meeting the following report of the Treasurer, for the year ending December 31, 1907, was read and accepted :

The balance on hand, as reported by Professor Hibben, December 31, 1906, was \$177.44. After the acceptance of the report by the Association, Professor Hibben received from dues of members \$2.00, making a total of \$179.44. Of this amount he spent \$10.00 to defray the expenses of the Columbia 'smoker'; \$31.50 for printing and stationery; \$6.35 for clerical aid and stenographer; \$3.91 for postage and telegraph; or a total of \$51.66, leaving a balance of \$127.78, which was turned over to the new Secretary, who presents the following statement for the year 1907 :

FRANK THILLY, SECRETARY AND TREASURER, IN ACCOUNT
WITH THE AMERICAN PHILOSOPHICAL ASSOCIATION.

Receipts.

Received from John Grier Hibben, the former Secretary and Treasurer.....	\$127.78
Received from Dues and the sale of Proceedings	191.90
Interest	2.30
Total	<u>\$321.98</u>

Expenses.

Printing Proceedings of the Association for 1906 ..	\$15.42
Stamps and Envelopes.....	11.60
Reply Postals.....	5.00

Announcements of Meeting, Stamps, and Envelopes	5.10
Printing of Programmes, Stamps, and Envelopes	10.75
Stationery and Printing.....	3.00
Clerical Aid and Stenographer.....	8.65
Express	1.29
	<hr/>
	\$ 60.81
Balance on hand, December 31, 1907.	261.17
	<hr/>
Total	\$321.98

The following officers were elected for the ensuing year: *President*, Professor Hugo Münsterberg, of Harvard University; *Vice-President*, Professor W. P. Montague, of Columbia University; *Secretary-Treasurer*, Professor Frank Thilly, of Cornell University; *Members of the Executive Committee*, Professor Ernest Albee, of Cornell University, and Professor Ralph Barton Perry, of Harvard University.

The following were elected to membership in the Association: Professor Frank C. Doan, The Meadville Theological School; Dr. Bernard Capen Ewer, Northwestern University; Professor A. Ross Hill, Cornell University; Professor James Gibson Hume, Toronto University; and Dr. Isaac Husik, Gratz College, Philadelphia, Pa.

Upon motion the President was instructed to appoint a committee of three (including the chairman) to consider the advisability of undertaking the publication of certain works of early American philosophers, and to present a report at the next meeting. Professors Gardiner, Royce, and Dr. I. W. Riley were named as members of the Committee.

It was voted that the selection of the time and place of the next meeting be left with the Executive Committee.

A resolution was passed by the Association "gratefully acknowledging the most courteous hospitality of the members of Cornell University."

The following are abstracts of the papers read at the meeting: **The Problem of Truth.** H. N. GARDINER.

[The President's Address, which appears in this number (March, 1908) of the PHILOSOPHICAL REVIEW.]

Visualization in Logic. GEORGE R. MONTGOMERY.

A system of visualization is valuable both for giving a different line of approach, and for articulating logic with mathematics. A system, useful both in formal and in inductive logic as well as in showing the relation between the two, can be based upon any system of geometrical coördinates where the relation to a certain point or axis is the basis. Any other particular relation will fall in its projection either within or outside the limits of the given fixed relation.

In formal logic, where the universe of discourse is impliedly present, the extension of terms may be represented by radii drawn to the circumference, having lines for the predicate, light lines for the subject, and unfinished radii for the possibilities in particular propositions. Such a system will be like Euler's circles, with the substitution of segments for circles, and like Lambert's lines, with the substitution of arcs for lines, besides having many advantages of its own. The easy rotation of the radii about the centre will enable a single figure to represent the different possibilities in any single proposition, and, the negation of the terms being constantly visualized, conversion can be readily pictured, as can also the various propositions which differ from the conventional four. By letting broken radii represent the middle term, the system can also be used in syllogisms, where single diagrams will sufficiently represent each form.

Such a system of visualization will be at the same time related to the representation by polar coördinates and also to representation by rectilinear coördinates. In the latter case, the y -axis is regarded as the circumference of an infinite circle. The system is also directly related to the system of points suggested by Kempe in his paper: "On the Relation between the Logical Theory of Classes and the Geometrical Theory of Points" (*Proc. London Math. Soc.*, Vol. XXI, p. 147).

The Nature of Absolute Knowledge in Hegel. G. W. CUNNINGHAM.

In the conception of absolute knowledge, as reached by the *Phenomenology of Mind*, we have Hegel's definition of the nature

of thought as it appears in concrete experience. This interpretation finds its justification, not only in explicit statements to be found in the preface of the *Phenomenology*, but also in the actual procedure of the *Phenomenology* itself, which is an investigation of experience from the epistemological point of view. Whatever may have been Hegel's view concerning the relation between the standpoint of absolute knowing and that of Absolute Experience, there seems to be no doubt that his point of departure in arriving at the former is the knowing experiences of finite individuals. Some of the more important characteristics of thought upon which Hegel here lays emphasis are the following: (a) In opposition to Kant and Fichte, who after all make thought essentially subjective, the standpoint of absolute knowledge emphasizes the essential objectivity of thought. And such objectivity, we are informed, implies that thought does express the essence of things, that is, is adequate to the real; and, secondly, that thought is not to be regarded as a private or particular state of the individual, but as in a sense transcending the individual. (b) Thought, therefore, being truly objective, has no datum opposed to and independent of it; on the contrary, it exhausts reality. But this is not to reduce reality to terms of mere abstract thought. For (c) thought is to be conceived of as possessing genuine universality; in Professor Bosanquet's phraseology, it is a process, not of selective omission, but of synthetic analysis. Thus the categories are concrete universals, identity in difference, and not blank identity. (d) Finally, thought has its criterion of truth immanent within it; indeed, truth is progressively defined only by means of its activity.

Evolution and the Miraculous. GABRIEL CAMPBELL.

[Read by title. This paper will be published in full in the *Bibliotheca Sacra*, April, 1908.]

The Bible in the History of Philosophy. ISAAC HUSIK.

The Bible and Greek Philosophy were developed in the main (so far as the first two divisions of the Canon are concerned and the early parts of the Hagiographa) independently of each other; and not until each was essentially complete did historical accident

bring them together in Alexandria. Here reciprocal influence was inevitable. The individuality of each was strong and not to be crushed. The one claimed to be the revealed word of God; the other, the conclusion of experience and reason. Extremists rejected one or the other. The rest accepted the two pillars of knowledge, *i. e.*, authority and reason, and endeavored to prove that there was no opposition between them. On the one hand, the Bible caused all the weight to be laid on the transcendental instead of the natural. The doctrine of the Trinity had an immediate influence on the fate of Nominalism and Realism. On the other hand, the conclusions of philosophy, particularly the Aristotelian philosophy, influenced the understanding of the Bible. In order to harmonize the physics and metaphysics of Aristotle with the Bible, and to find Aristotle's teachings therein, recourse was had to allegorical interpretation, to esoteric meanings. Hence each school of philosophy had a different conception of the teachings of the Bible. To determine with precision how the text of the Bible influenced any thinker in formulating his philosophical views, we must know when he lived and in what schools he was trained. These general statements may be illustrated in Philo. The method as well as the content of his philosophy bears distinct traces of Biblical influence, *viz.*, his God, Logos. In his method of interpretation, he changed the map of the Bible, so to speak. Philo influenced some of the writers of the New Testament and the Fathers of the Church, *e. g.*, Clement of Alexandria and Origen. What has been said of the Patristic period applies equally to the early Scholastic period from the eighth to the twelfth centuries. The Jews were subject to Mohammedan rule, and got Aristotle from the Arabs. The Bible they knew in the original. The Mishna and Talmud were used as collateral authorities. The synthesis of Maimonides was superior to that of Abélard or Scotus Erigena, because more methodical and rational. The second Scholastic period, from the thirteenth century, was different from the first. The whole of Aristotle was known through translations. The effect was twofold: (*a*) Widening of the sphere of philosophy to include all branches of thought represented in the Aristotelian *corpus*; (*b*) narrowing of the sphere

of philosophy by separating out specifically religious doctrine. This separation was emphasized later by the Nominalists. Interpretation with Lessing and Kant was no longer naïve and spontaneous, but conscious and artificial, in the interest of the moral law.

The Teaching of the History of Philosophy. BROTHER CHRYSOSTOM.

[Read by title.]

The Factual. WALTER T. MARVIN.

By the 'factual' is meant the content of which we are immediately aware. The problem of the paper is: Are there judgments of which the factual forms the complete warrant; and if so, how are these judgments related to the remainder of our knowledge?

The chief premise of the paper is that any body of knowledge can be regarded as a deductive argument and as such can be submitted to logical analysis to determine its premises. The ultimate premises, *i. e.*, the premises that are not conclusions from other premises, are called primary judgments. These can be *conceivably* of three kinds: axioms (assumptions that we are unable either to prove or to disprove); factual judgments (those having full factual warrant); logical leaps (pure inductive inferences).

That human knowledge is not a deduction from axioms alone, all admit. Can it be from axioms and logical leaps? That mere guess *plus* a few axioms should have given us a body of knowledge as consilient as the special sciences, would be little less than miraculous. In fact, all admit that what we see and hear does influence our knowledge; but by hypothesis this influence can be only that which a premise has upon a conclusion. In short, there must be judgments having full factual warrant, *e. g.*, mere awareness of difference between red and green, or that *a* is bigger than *b*.

It will be objected: First, none of our actual judgments are merely factual and primary. Reply: Our actual judgments are logically complex in which factual judgments exist but cannot be isolated. Secondly, their existence would mean a limitation

to the scope of the principle of contradiction, since such judgments in no way depend upon consilience with other judgments for their proof. Reply: Such limitation would not mean that these judgments might contradict one another because they are absolutely particular. Only conclusions from them can contradict, and this would require not new premises but a revision of our inferences.

Thus part of our premises have immediate warrant; others (logical leaps) and our conclusions await their proof, and the principles of consilience form the basis of this proof. Moreover, the existence of these factual judgments must be taken into account in working out a theory of judgment. The judgments usually made the basis of study are often highly complex, in short, can be analyzed into several judgments. That is, a judgment is mere awareness of relation between terms.

The Mental Process in Cognition. A. E. TAYLOR.

The real 'Copernican revolution' in modern philosophy has been made by Avenarius rather than by Kant. What Avenarius has done is to show how the subjectivism which infects most modern philosophy is due to the confusion of two views of the relation of the external world to the knowing individual. According to one of these views, the external world is the cause or stimulus of which knowledge is the effect; according to the other, the external world is related to the knower simply as the object of his apprehension. The relation of cause and effect holds good between various constituents of this object, but must not be conceived as subsisting between the object of knowledge and the knower. From the thoroughgoing rejection of a 'cause and effect' theory of knowledge, some important consequences may now be deduced. The starting-point for a theory of knowledge is not the existence of stimuli, but the existence of a multitude of apprehended objects, colors, tones, bodies, concepts, feelings, emotions, volitions, etc. On inspection this aggregate is found to fall into two minor mutually exclusive aggregates, that of 'mental' states or processes, and that of extra-mental things. The peculiar characteristic of the members of the mental aggregate is that any

proposition asserting their existence can be replaced, without change of meaning, by one which asserts a predicate of the knowing subject itself. This is not true of the aggregate of the extra-mental. When I experience blue, it is not I who am blue, but some presented object other than the experiencing 'I.' Now the extra-mental, as thus defined, includes not only bodies and their perceived qualities, but all so-called 'mental images,' 'ideas,' 'concepts.' None of these are what they have too often been called, 'states of mind'; their predicates are fundamentally different from those of the processes in which they are apprehended. They are, in fact, objects experienced, not processes of experiencing. What, then, are the mental processes involved in cognition? The sole ultimate cognitive process of which we know is belief, or judgment, and it is of processes of judging, not of 'ideas,' that knowledge is built up. Perception is, *e. g.*, properly, simply the assertion of an existential proposition which includes in its meaning a reference to present time and to a determinate region of space. The cognitive process thus takes its place by the side of the other forms of the Yes-No attitude of mind towards its objects, which it is the function of Psychology to study. There is no reason to believe in the existence of any simpler or more ultimate mental processes corresponding directly to the action of stimuli on the organism. The alleged correspondences established by Psychophysics between variation in mental process and variation in stimulus should be conceived of rather as correlations between variations in the qualities of bodies outside my skin and variations in the behavior of an object in space inside my skin, *viz.*, my nervous system. The chief difficulty likely to be suggested by the foregoing view of 'ideas' as extra-mental objects is the question, "What kind of object, in particular, is it that we apprehend when we have, *e. g.*, a visual image of the face of an absent or dead person?" One may perhaps reply, that the object in such cases is identical with the real physical object of the corresponding actual perception, the only difference lying in the *bodily* concomitants of the experience, just as the object I see when I look into a mirror is really not a 'reflection' of my body, but my own body itself, 'mirror-

vision' and direct vision differing not in the object apprehended, but only in the character of the physical cause of the accompanying stimulation of the retina. Images would thus be, for a theory of knowledge, merely a peculiar class of percepts, percepts of what does not actually exist as a constituent of my *present* physical environment. That such perception of what does not actually exist is possible is shown by any case of genuine hallucination. The interpretation of the presented image as standing for past or future real physical fact, of course, belongs not to the object, but to the judgment made about it. In any case, it is false to speak of knowing as a process of combining 'ideas,' since knowing is a mental process, and 'ideas' are extra-mental objects. To know is not to put extra-mental things into certain relations, but to affirm that they *are* so related. Two general corollaries may be appended. (1) A sound philosophy has to start with concessions both to Dualism and to Pluralism. Both the contrast between the I-element and the extra-mental elements in the world of the experienced, and the plurality of I-elements, or knowers, appear among its data, and cannot be simply suppressed in its result. The real difficulty is not to see how there can be a reality 'behind' 'phenomena,' but how any element in the real presented world can be mere 'appearance.' (2) Of existing doctrines that which approximates most closely to the truth is probably the Monadism of Leibniz, though it is clear that some of the logical postulates of Monadism must be false, since they lead to the view that the physical world is made up of distinct and independent causal series, and there is good reason to regard this conclusion as untrue.

Subjectivism and Realism in Modern Philosophy. NORMAN SMITH.

This paper has a twofold aim : First, to state the arguments which seem to prove that subjectivism in all its various forms is incoherent and untenable ; secondly, to present for discussion that particular form of realism which seems to contain most promise for satisfactory solution of the complex problems involved. The contradiction involved in subjectivism consists in its

view of our ideas as standing to objects in a twofold simultaneous relation : cognitively, as their apprehensions, and mechanically, as their effects. The first is a relation of inclusion, the second is a relation of exclusion. The first view of mental states must be accepted if the subjectivist argument is to have a starting-point ; it cannot be valid if the subjectivist conclusion is correct. The only way of escape seems to be that which is followed by Avenarius and by Bergson. We must deny that sensations are effects generated or occasioned by the brain. The brain is the organ only of our activities and not of our consciousness. Avenarius fails, however, to establish this realistic philosophy. Bergson, on the other hand, has developed it in commendable detail, showing how it may adequately interpret the known empirical facts.

The Objectivity of Knowledge. EDMUND H. HOLLANDS.

The aim of this paper is to consider the bearing upon objective idealism of a new type of realism. This neo-realism is sharply distinguished from the older realism by an explicit rejection of the representative theory of knowledge. In this it agrees with idealism ; but it differs from it in holding also that knowledge makes no difference to the facts. This necessitates a polemic against idealism. Thus far, all the realistic writers have assumed that the fundamental tenet of idealism is, that *esse is percipi*. This is a radical misconception of the idealistic statement that reality is spiritual, for this is not meant in a psychological and subjective sense, and it is a conclusion, not a point of departure. A further objection of G. E. Moore to the idealistic definition of reality is invalid, as it involves an untenable distinction between possibility and reality. The idealist, therefore, accepts the realist's polemic against subjectivism, while denying its application to his own theory. On the constructive side, neo-realism has taken two directions. One set of writers regard consciousness as 'awareness,' which is the same for any objects whatever. Consciousness as *mere* awareness, however, is only an analytic abstraction. Others define consciousness as a relation, of meaning, between the objects. This second definition has not as yet been very clearly stated or exemplified. However, even if we admit a relational

definition of consciousness, its implications are not, as has been supposed, realistic. Terms presuppose relations, just as much as relations presuppose terms. Nor does the supposition that the terms are 'simples' avoid this conclusion, especially when we raise the question as to the truth of a proposition or of an inference. When it is pointed out that objects are shown by evolution to be prior to consciousness, and that consciousness is not a permanent relation, it may be replied that objects are nevertheless admitted to be determined for knowledge, and that time is no less a difficulty for the realist than for the idealist. To start, then, with relations, and try to arrive at reals, and to start with reals and try to arrive at their relations, are equally abstract procedures. The first is the method of *subjective* idealism; the second is, apparently, that of this type of realism, in so far as it is in any way distinguishable from idealism. The concrete reality is a system of related things; and the metaphysical problem is, What is the nature of this system?

What is the Function of a General Theory of Value? WILBUR URBAN.

In the first part of the paper the writer argued for the necessity of a general theory of value, which, being based upon general psychological analysis, would make possible a systematic treatment and fruitful genetic correlation of the different values and value judgments of Economics, Ethics, *Æ*sthetics, and Religion. In the development of the argument, the writer showed that the present change of emphasis from truth to value had brought to light the interrelation of all values and the inadequacy of the points of view and methods of these separate sciences of value when working alone. From such a general theory, it was further argued, in the second part of the paper, would develop an *axiological* point of view, similar to the epistemological, in which the nature and grounds of the *objectivity* of value judgments would be determined, as well as their relation to factual and truth judgments. The paper [which was published in full in the January number of the *PHILOSOPHICAL REVIEW*] seeks in addition to estimate the contributions already made to such a general theory.

Ultimate Reality and Progress. J. A. LEIGHTON.

A brief discussion of the relation between the notion of spiritual progress in individuals, cultures, and peoples, and the notion of time-transcending, intrinsic, intellectual and moral values. The discussion started from the premise that the validity of truth, as a systematic organization of values, and ethical goods, as realized in a systematic whole of sentient beings, presupposed the reality of a dynamic and systematic whole of meanings or intrinsic values in the universe; in short, the validity of a dynamic intelligence. The reality of historical progress in and through individuals was recognized. This field was designated the realm of 'historical reality.' It was argued that ultimate reality and historical reality are not separable kinds of reality; that ultimate reality must manifest itself continuously in the realm of historical reality; that, consequently, values are realized in a living 'now,' which transcends the temporal distinctions of past, present, and future; and that in this living present reality is expressed. It was maintained that past and future have real meaning only as contained in the concrete, over-historical present. Objections to this view were regarded as resting: (1) on a confusion of the qualitative and quantitative concepts of reality; (2) on an illegitimate extension of the notion of terrestrial evolution to the whole meaning of reality. It was insisted that the very notion of progress implied timelessly valid norms of progress. It was suggested that there might be a real meaning in progress, while yet the notion that ultimate reality progresses in its intrinsic values may be illusory. Finite elements of reality may change while the unity of values maintains itself invariant. Ultimate reality may be a concrete, dynamic unity, ever manifesting itself in the processes in and through which finite centres of experience realize values, and yet maintaining itself somehow as the systematic time-transcending principle of intrinsic values, as the unchanging unity of the meanings that are temporally winning expression in the realm of finite multiplicity.

An Introductory Statement of Realism. BERNARD C. EWER.

Realism, as an epistemological doctrine, exhibits two divergent types. According to one, consciousness is a relation, usually

called awareness, between the knower and an external object, and all qualitative distinctions attributed to consciousness are properly regarded as really located in the objects themselves as essential qualities or forms of organization. The principal difficulty with this view arises in facts like illusions which seem to inhere in the nature of consciousness itself. The second type is representationalism, according to which the object of consciousness is a state of consciousness corresponding to an external reality, — a position which slips easily into idealism. To save realism, it is necessary to hold both of these positions together, *i. e.*, to say (1) that consciousness is directly aware of external things, (2) that it has internal qualitative differentiations of which it is also conscious, and (3) that these characters appear in varying degrees of relative prominence in actual experience. It is not a sound objection to assert that awareness of external reality is inexplicable; and the alleged inconsistency between such awareness and the temporal duration of intermediate physical processes, *e. g.*, light, fails if awareness may be retrospective. Where the object of consciousness is conscious content itself, there is in general no real distinction between the two. Denials of this identity serve only to show that there may be a superimposed self-consciousness, and so miss the point. The best statements about these two characters, awareness and conscious content, are furnished by descriptive psychology. It is objected that the assertion of such a dualistic nature as essential to consciousness is unphilosophical, since there is an inevitable presumption in favor of reducing one character to the other. To do this, however, is to belie the facts, and simply to continue the outstanding differences of epistemological theory.

The Problem of Sin. H. H. HORNE.

The modern sense of sin is social in character, not ceremonial as with primitive peoples, nor individualistic as with the Semites. But no school of modern philosophy has as yet adequately interpreted this new phase of the sense of sin. Absolutism proposes a solution of the problem of evil that does not sufficiently distinguish physical and moral evil. Pragmatism has not yet treated the problem.

The question raised by this paper is, Can the problem of sin be solved on absolutistic principles and at the same time in accord with legitimate pragmatic demands? The general answer to this question is in the affirmative. What sort of a world is it in which sin occurs? Pragmatism says: (1) a temporal world, (2) a world in which a better is possible to men, but is not made actual by them; (3) a world in which the better is conceived as the will of God for man; (4) a world that at any moment is, in so far as man is a sinner, short of the best possible world; and (5) a world whose moral value fluctuates from moment to moment with the deeds of men.

The body of the paper indicates how, by distinguishing the temporal from the eternal order, the position of absolutism can be so stated as to include and fulfil these pragmatic demands. But such reconciliation between absolutism and pragmatism in the problem of sin involves the introduction of the idea of an Absolute suffering for the sins of men. Sin is man's failure to embody as much of God's perfection as he might in the temporal order, and the modern social sense of sin means damage to the establishment of the will of the Eternal in the kingdom of the temporal.

Discussion: The Meaning and Criterion of Truth.

WILLIAM JAMES.

My account of truth is realistic, and follows the epistemological dualism of common sense. Suppose I say to you: "The thing exists," — is that true, or not? How can you tell? Not till my statement has unfolded its meaning farther is it determined as being true, false, or irrelevant to reality altogether. But if now you ask, "What thing?" and I reply "a desk"; if you ask "where?" and I point to a place; if you ask, "Does it exist materially or only in imagination?" and I say "materially"; if, moreover, I say, "I mean *that* desk," and then grasp and shake a desk which you see just as I have described it, you are willing to call my statement true. But you and I are commutable here; we can exchange places; and as you go bail for my desk, so I can go bail for yours. This notion of a reality independent of

either one of us, taken from ordinary social experience, lies at the base of the pragmatist definition of truth. With some such reality any statement, to be accounted 'true,' must 'agree.' Pragmatists explain this last term as meaning certain actual or potential 'workings.' Thus, for my statement, "The thing exists," to be true of a determinate reality, it must lead me to shake *your* desk, it must explain itself by terms that suggest *that* desk to your mind, etc. Only thus does it 'agree' with *that* reality, and give me the satisfaction of your approval. A determinate *reference* and some sort of satisfactory *adaptation* are thus constituent elements in the definition of any statement as 'true.'

And you can't get at the notion of either 'reference' or 'adaptation' except through the notion of 'workings.' *That* the 'thing' is, *what* it is, and *which* it is (of all the possible things with that *what*) are points determinable only by the pragmatic method. The *which* means our pointing to a locus; the *what* means choice on our part of an essential aspect to apperceive the thing by (and this is always relative to what Dewey calls our 'situation'); and the *that* means our assumption of the attitude of belief, the reality-recognizing attitude. Surely these workings are indispensable to constitute the notion of what 'true' means as applied to a statement. Surely anything less is insufficient.

Our critics nevertheless call the workings inessential, and consider that statements are, as it were, *born* true, each of its own object, much as the Count of Chambord was supposed to be born King of France, though he never exercised regal functions, — no need of functioning in either case! Pragmatism insists, on the contrary, that statements are true thus statically only by courtesy; they practically pass for true; but you can't *define* the particular truth of any one of them without referring to its functional results.

J. E. CREIGHTON.

A philosophical account of the nature of truth is possible only in the light of a general theory regarding the nature of experience. The history of the recent discussion regarding Pragmatism illustrates the comparative barrenness of philosophical criticism which is not carried on from any systematic point of view. The

failure of the pragmatists to define their own standpoint, or perhaps to take any definite standpoint at all, is mainly responsible for the misunderstandings of which they complain. Nevertheless, although the sensational side of Pragmatism, — the account of truth in 'practical' terms, — has been definitely refuted, it is possible to regard the pragmatic movement as a protest against abstraction, the besetting sin of philosophical constructions. In particular, it may be regarded as a protest against a narrow and formal view of logical consistency, and therefore as akin in aim and spirit to Hegel's appeal from the abstract distinctions of the Understanding to the more concrete standpoint of Reason.

CHARLES M. BAKEWELL.

The impossibility of defining truth in terms of the verifying process comes out clearly in the writings of the pragmatists themselves wherever time is in question; for they are then forced to admit that "when new experiences lead to retrospective judgments, using the past tense, what these judgments utter *was* true, even though no past thinker had been led there." This is equivalent to making truth consist in a relation that is there to be discovered prior to the process of truth getting. And it is a fundamental mistake to take the agreement formula as giving the original, natural, instinctive, and obvious meaning of truth; for men sought after truth, used the word, knew what they meant, and were more or less successful in their search long before they were sufficiently self-conscious, and sufficiently sophisticated, to understand what the agreement formula means. The natural standpoint is far more object-minded, and we get most light on the meaning of truth by asking what men are actually after when they are seeking truth. As a matter of fact, they are always trying to anchor a passing experience by getting it in a setting where it will 'stay put.' It finally appears that this means trying to conceive a particular experience in the light of its idea, or concrete universal, that is, to conceive it in its total context or setting. One is trying to read the momentary fact of experience as it comes along in its absolutely total experiential setting, such a setting being the one in which no item of possible or actual experience is left out. The implication is that each particular

object of experience has its definite place in that complete context, which is commonly referred to as the realm of experience. When one appeals to experience as giving the test or control of truth, it is always experience in this transcendent sense that is meant, transcendent, because it is more than my experiences, or the sum of all of our experiences, since it must include the possible as well as the actual experiences, and also all experiences that once were, but no longer are possible experiences. Truth means grasping the transient fact in this transcendent context. This context is real, and lives in every fact of experience, being just the setting that is needed to give the particular experience *its own* significance. There may be, and are, many contexts, and one may, as in the special sciences, view a fact in one context ignoring all others. None the less the other contexts are part of that same fact's meaning, and to get the truth about it the ignored contexts must be restored. So surely as we are entitled to refer to experience *im prägnanten Sinne*, or to an order or realm of experience, so surely must we hold that these partial contexts have their place in the complete context; and, since the particular context is defined by the categories through which the object is viewed, this is equivalent to saying that all possible categories must have their own organic interconnectedness. Thus truth finally means vision in the light of the whole.

JOHN GRIER HIBBEN.

Pragmatism, when submitted to its own test, is found wanting in certain cases. It is obviously inadequate as a theory of truth, and this in the following three particulars:

1. It is inadequate as a working hypothesis. The expedient as such is very often found to be a false lead. There are many cases of concealed utility which only long stretches of time can reveal; moreover, the most significant instances of utility are often the result of a combination of a number of separate elements, each one of which is in itself absolutely useless. Where the utility is thus not apparent, it cannot be taken as a practical test of immediately necessary choices. Again, in the development of science the need has not always created the discovery in order to meet it; but the discovery, due wholly to speculative and

theoretical interest, has created the need. As instance of this, I would cite the discovery of the relation between magnetism and electricity, and the consequent inventions of the telegraph, the telephone, and electric motors of various kinds. Needs never before imagined have been created by the discovery of this new world of knowledge. The demand for the cash value of every truth forces a result which represents truth at a discount. For cash value in general is secured in most cases only through some discounting process.

2. Pragmatism is inadequate because we instinctively subordinate its testing principle to higher considerations. While emphasizing the importance of purposive thinking, we must not forget that we must obey the rules of the game. We think towards certain desired ends; but it is always under the limitations of rule and penalty. Professor James is conscious of these necessities of thought and reality. He speaks repeatedly of the need of a moral order, an eternal order, an ideal order, of the coercion of our sensible experiences and of our mental operations. Our 'funded experience' is not a collection of particular experiences, but a system of coördinately related parts showing order, coherence, universality, and necessity. We not merely ask the question, Does it work? but the further question, Why does it work? The man who understands best the nature of things and their controlling necessities can do most with them practically.

3. Pragmatism is inadequate because of the limitation of the alleged creative function of thought and endeavor. We can force things actually to be and to behave according to our wills only within limited areas of experience. It is only in a very restricted sense that we can be said to make truth. If we are progressing towards a more complete unification of the body of our knowledge, does not the growing coherence and unity indicate an underlying ground as well as a desired goal?

C. A. STRONG.

The criticisms I am going to offer on Professor James's theory, unlike those of previous speakers, will (I think I may say) be from his own point of view. I accept his epistemological realism, — the view that cognition and object are separate existences, — and

his disbelief in an existential Absolute whose business it is to bring them into relation; I hold with him that the existential basis of truth must be sought in the concrete connections which join them as parts of a universe. My complaint is that his account of these connections is incomplete; that he mentions only those by which cognition and object converge in future consequences, and overlooks, (1) the causal relations by which the object, or a similar object, has produced the cognition; (2) the spatial connections between the object and the cognition, or at least between the object and the brain-event with which the cognition varies uniformly, connections which hold the cognition even now in relation to the object, much as a well-aimed gun is held in relation to the mark it is going to hit; (3) the relation of resemblance (or correspondence, or conformity, or relevancy, as you please; I refer to the degree of resemblance actually existing) which makes this image the right one among all our images to let loose the reaction appropriate to *that* object.

These relations are antecedent to the consequences, and play a more important part than they in constituting the existential basis of what we call truth. Or rather, as we ought perhaps to say, the connections in their totality, including the consequences or workings, constitute the existential basis of *cognitive reference*; and truth, as distinguished from this, lies more especially in the relation of resemblance or correspondence.

To say that truth 'consists in the consequences' is as if one should say that the correctness of a sportsman's aim is not merely proved by, but consists in, his actually hitting the bird. But, surely, it consists rather in his holding his gun at a certain angle, such that, given the laws of physics, the bullet or shot must pass through the body of the bird. The correct aiming comes before the hitting, and is possible without it.

Professor James replies that you cannot define what you mean by correct aiming without including the concept of hitting. This is true, but it is important to note that the hitting is included as a potentiality, and not as an actual performance. Suppose the world should come to an end at this moment: would my idea, *e. g.*, of Cæsar's assassination on the Ides of March be any the

less true, because by hypothesis it can have no consequences? The example shows that it is only the potentiality of the consequences that is essential. But this potentiality, when you consider it, is exactly equivalent to the relations of space and of correspondence which predetermine what the consequences shall be. Truth, then, is antecedent to the consequences, and does not consist in them.

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